October 30, 2009

Mr. Michael Forbes
City Planner
CITY OF BURBANK
275 East Olive Avenue
Burbank, California 91502

Bureau Veritas Project No. 25098-098191.01

Subject: Status Report of Vapor Extraction System Operation (VES)
Lockheed-Martin B-1 Site
April 21, 2009 through August 28, 2009

Dear Mr. Forbes:

Bureau Veritas North America, Inc. (Bureau Veritas) has prepared the following status report for the Vapor Extraction System (VES) operation at the Lockheed-Martin B-1 Site for the period of April 21, 2009 through August 28, 2009. The purpose of this report is to provide the analytical results of the effluent air sample and an independent calculation of the system's air emissions and its compliance with the permit conditions. The remaining sections of this report are as follows:

- Background
- Bureau Veritas Field Activities
- Results of Laboratory Analysis
- Health Risk Assessment Calculations
- Conclusions

## BACKGROUND

Alton Geoscience conducted a "Phase I" and "Phase II" of VES effluent sampling and health risk assessment calculations for the Lockheed-Martin B-1 facility. Phase I consisted of twelve weekly health risk reports based on samples collected between September 2, 1997 and February 9, 1998. Phase II included twelve bi-weekly health risk assessment calculations based on samples collected between February 16, 1998 and September 9, 1998. Phase III consisted of monthly sampling between October and December 1998.

Phase IV of the VES effluent sampling consists of VES effluent sample acquisition, laboratory analyses, and health risk assessment calculations to be performed once per quarter for the remainder of the project. The first and second quarterly health risk

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assessment calculations were provided by Alton in reports dated January 18, 1999 and May 24, 1999, respectively.

Since March 2000, Bureau Veritas personnel have been collecting effluent samples of the unit at a frequency of two to four events per year. When the system operates continuously throughout a 12-month period, samples are collected on a quarterly basis. The frequency of sampling is determined by Earth Tech (an environmental consulting firm), which notifies Bureau Veritas personnel within a few days before they collect effluent samples so that Bureau Veritas can collect a sample simultaneously.

Earth Tech was rebound testing during the initial Bureau Veritas sampling event. In early 2000, Earth Tech re-started the system for continuous operation. In September 2002, they continued the rebound test efforts in which the system is down for extended periods of time then re-started for testing purposes (see table below). During these activities, a sample is collected by Bureau Veritas and a report is prepared.

| Date Issued | Sampling Date |
|---|---|
| November 23, 1999 | October 14, 1999 (rebound testing) |
| March 13, 2000 | (Restart of system) |
| May 16, 2000 | March 2000 |
| July 12, 2000 | June 2000 |
| November 17, 2000 | September 2000 |
| February 22, 2001 | January 2001 |
| May 31, 2001 | April 2001 |
| August 21, 2001 | August 5, 2001 |
| November 12, 2001 | October 19, 2001 |
| March 29, 2002 | January 28, 2002 |
| June 6, 2002 | April 29, 2002 |
| August 23, 2002 | July 26, 2002 |
| January 8, 2003 | October 30, 2002 (rebound testing) |
| March 4, 2003 | February 3, 2003 |
| January 7, 2004 | December 9, 2003 (2 reports issued) |
| September 3, 2004 | August 18, 2004 |
| July 13, 2005 | May 24, 2005 |
| September 1, 2005 | August 16, 2005 |
| November 18, 2005 | October 17, 2005 |
| April 25, 2006 | April 3, 2006 |
| July 15, 2006 | June 27, 2006 |
| April 9, 2007 | March 9, 2007 |
| August 10, 2007 | June 6, 2007 |
| November 30, 2007 | October 16, 2007 |
| June 6, 2008 | April 16, 2008 |
| September 30, 2008 | July 29, 2008 |
| December 31, 2008 | October 16, 2008 |
| March 11, 2009 | January 28, 2009 |
| June 8, 2009 | April, 20 2009 |
| October 14, 2009* | August 28, 2009 |

* Subject report

## BUREAU VERITAS FIELD ACTIVITIES

On August 28, 2009, personnel from Bureau Veritas met with Earth Tech personnel to conduct sampling of air emissions at the Lockheed-Martin B-1 Site VES. Bureau Veritas and Earth Tech personnel each collected an exhaust sample using an evacuated Summa canister; connected via a disposable Teflon® tube to the VES unit's sampling port.

During the sampling period, the exhaust flow rate was 907 standard cubic feet per minute (scfm). Only one stack analyzer was in operation this event monitoring volatile organic compound (VOC) concentration. The other stack analyzer was sent for repairs. The reading was 0.44 parts per million (ppmv). Laboratory results indicated a total VOC concentration of 0.019 ppmv, as described in the following section. Discrepancies between stack analyzers and laboratory results are not uncommon, since one is quantitative and the other is qualitative. In addition, the stack analyzers may detect additional VOC compounds that are not in the TO-14A analysis conducted by the laboratory. Direct readings of VOC emission rates in the field were within acceptable operating conditions for the VES. The 15-minute average VOC emission rate indicated at the time was 0.288 pounds per day (lbs/day), while the 24-hour average value was 0 lbs/day.

The sample collected by Bureau Veritas was submitted to TestAmerica Laboratories, Inc., Santa Ana, California, under chain of custody protocol for analysis by gas chromatography/mass spectrometry (GC/MS) in accordance with EPA Method TO-14A.

## RESULTS OF LABORATORY ANALYSES

The results from the TO-14A analysis of the sample taken on August 28, 2009 indicated that five (5) compounds were present in concentrations at or above the detection limits. Following are a list of these compounds and the concentrations indicated by the analysis:

| Compound | Concentration (ppmv)[1] |
|---|---|
| Carbon Disulfide | 0.0062 |
| Dichlorodifluoromethane | 0.0051 |
| Total Xylenes | 0.0034 |
| Tetrachloroethene (PCE) | 0.0026 |
| Trichloroethene (TCE) | 0.0019 |

1 ppmv = parts per million by volume

The above compounds have all been detected in previous sampling events. Dichlorodifluoromethane, also known as Freon 12, was detected at levels comparable to past data. Carbon Disulfide last detected in October 2008 was below the reporting limit. Total Xylenes concentration just more than doubled the pervious time it was detected in June of 2006. The number of detected compounds (five) remained the same as the sample collected on April 20, 2009. Overall, lab data is consistent with the historical trend.

Using the analytical data, an overall VOC emission rate of 0.007 lb/day was calculated. This value is comparable to the 24-hour average VOC reading (0 lb/day) provided by the in-line organic vapor monitoring system. In addition, this value is below the calculated VOC emission levels designated by the Conditional Use Permit (CUP) limit of 9.8 lb/day. These results, along with the previous calculated total VOC emissions for the unit, were plotted on Figure 1. Vinyl chloride was not detected in the sample taken. Therefore, its CUP limit of 0.14 pounds per day was not exceeded.

## HEALTH RISK ASSESSMENT CALCULATIONS

In accordance with the CUP, the stack concentrations of each constituent and the exhaust flow rates were used to calculate the excess cancer risk resulting from operation of the VES. The first risk calculation was to determine the risk if the unit was operated for a lifetime period of 70 years, evaluating the risk to both workers and local residents for those chemicals specified in SCAQMD Rule 1401, as adopted at the time the unit was permitted. The second risk calculation was to determine the risk to both workers and local residents for the life of the project (the 8.5-year operating period), for all detected chemicals for which carcinogenic risk factors are available.

The resulting cancer risk calculations for both conditions indicated an acceptable Maximum Individual Cancer Risk (MICR) significantly less than one in one million. The results from these calculations, along with the MICR results from previous calculations for the unit, are presented on Figures 2 and 3, for 70-year and 8.5-year calculations, respectively.

## CONCLUSIONS

Based on the results of the information gathered and samples taken on August 28, 2009, the following conclusions can be made:

- The number of compounds detected remained the same as the previous sampling event. All of the detected compounds have exceeded their reporting limits in the past. (See attached lab data for specific reporting limits).

- All measured emissions are within the permit conditions. Since vinyl chloride was not detected, its CUP limit of 0.14 pounds per day was not exceeded. Excess cancer risks (MICR) were less than one in one million for workers and local residents, using both 70-year lifetime and 8.5-year operating period risk calculations.

If you have any questions or require additional information regarding this status report, please contact one of the undersigned at 714.431.4100.

Prepared by:

Kevin Martin
Environmental Consultant
Environmental Services

Reviewed by:

Gustavo Valdivia, P.E. No. C57702
Manager, Engineering and Remediation
Environmental Services

KM/GV:dh

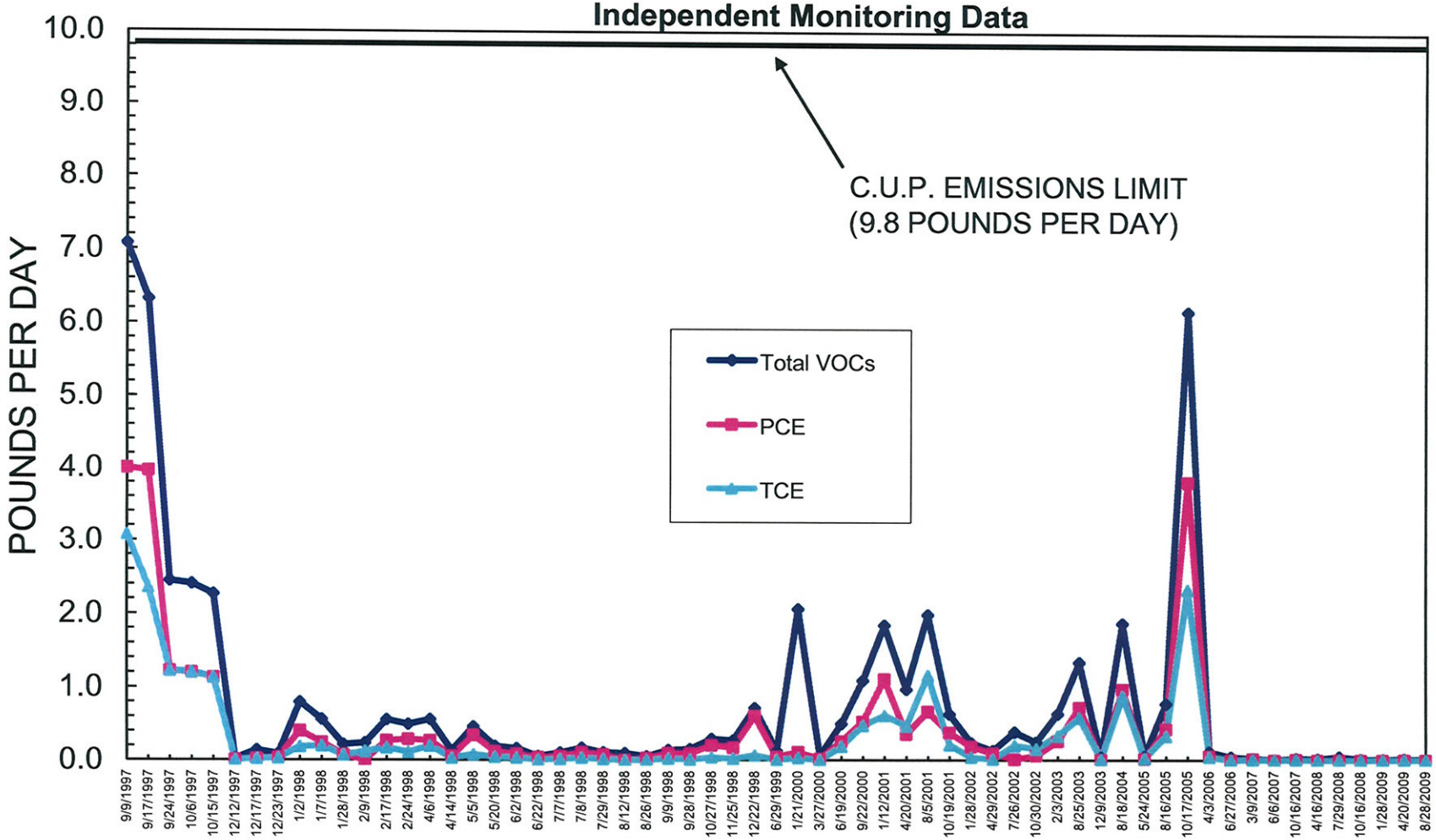
Attachments:

- Figure 1 - Daily VOC Emissions
- Figure 2 - Human Health Risk (70 Year Lifetime)
- Figure 3 - Human Health Risk (8.5 Year Operating Period)
- Laboratory Report

cc: Stacey Ebiner, South Coast Air Quality Management District

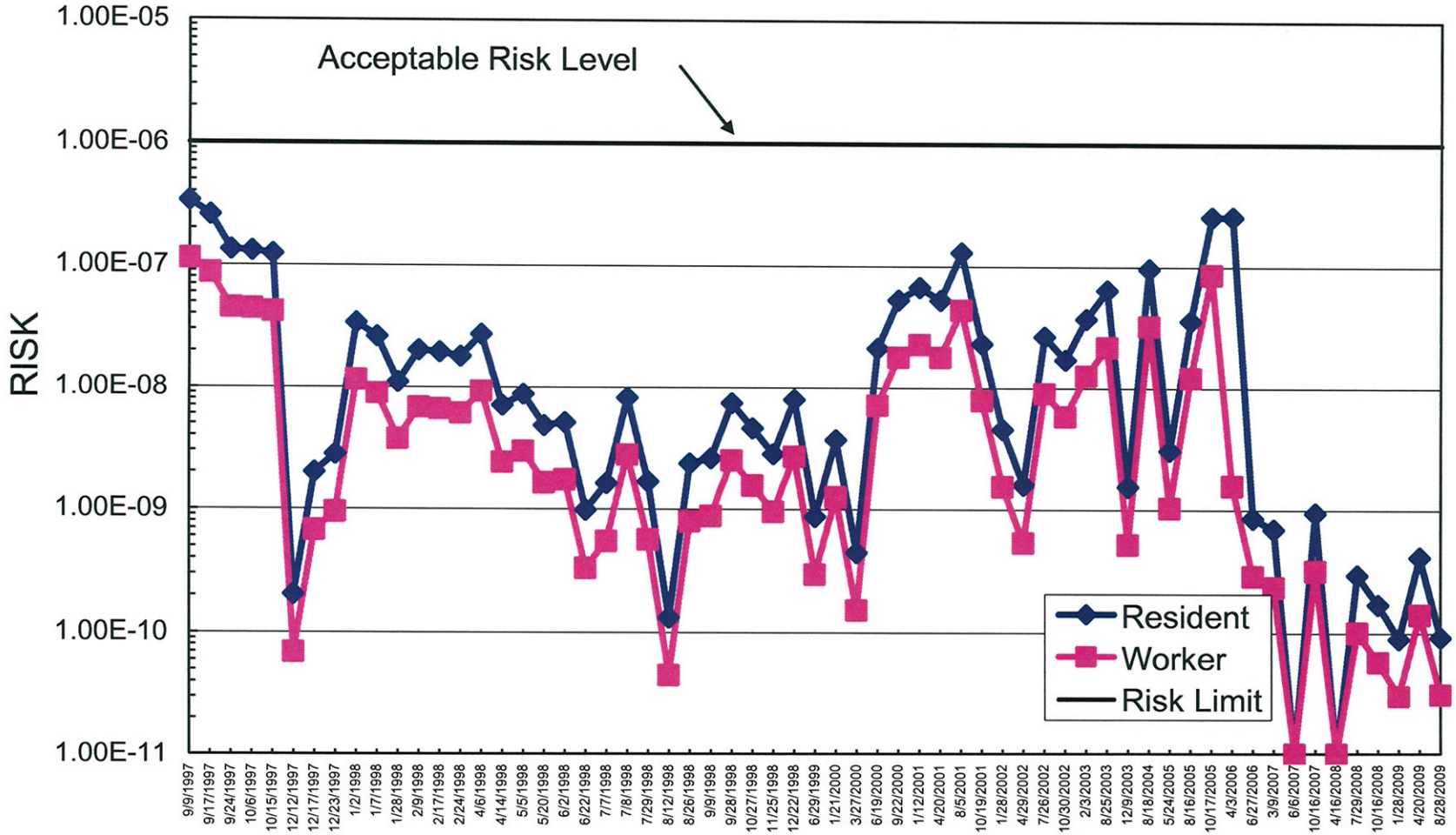
# FIGURES

# FIGURE 1 - DAILY VOC EMISSIONS
## LOCKHEED B-1 VES
### Independent Monitoring Data



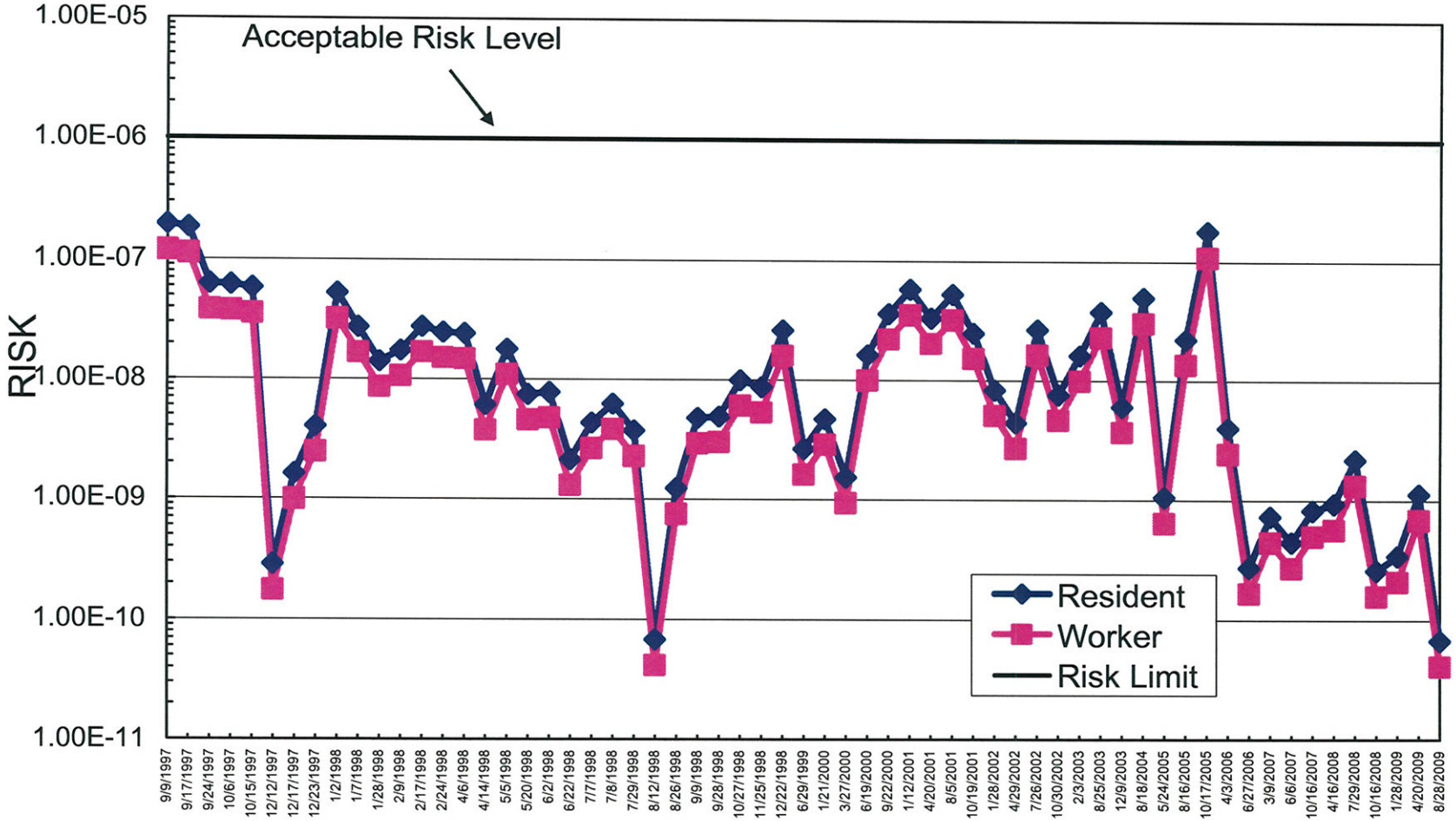

S:\Proj\P98191\Burbank VES Status Reports\
Copy of Burbank-Lockeed Risk Calc.xls\VOC Mass chart (Fig 1)

# FIGURE 2 - HUMAN HEALTH RISK
## LOCKHEED B-1 VES
## SCAQMD RULE 1401 CHEMICALS
## HYPOTHETICAL 70 YEAR LIFETIME




S:\Proj\P98191\Burbank VES Status Reports\
Copy of Burbank-Lockeed Risk Calc.xls\1401 Risk Chart (Fig 2)

# FIGURE 3 - HUMAN HEALTH RISK
## LOCKHEED B-1 VES
## DURING 8.5 YEAR OPERATING PERIOD




S:\Proj\P98191\Burbank VES Status Reports\
Copy of Burbank-Lockeed Risk Calc.xls\8.5 Year Chart (Fig 3)

# LABORATORY REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
3585 Cadillac Avenue, Suite A Costa Mesa, CA 92626 * 714-258-8610 * Fax 714-258-0921

September 10, 2009

# LABORATORY REPORT

Client:
Bureau Veritas N.A. Inc Costa Mesa
1565 MacArthur Blvd
Costa Mesa, CA 92626
Attn: Gustavo Valdivia

| | |
|---|---|
| Work Order: | LSH0181 |
| Project Name: | City of Burbank |
| Project Number: | 25098-098191.01.001 |
| Date Received: | 08/31/09 |

*TestAmerica Los Angeles certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the Corrective Action Report. NELAC Certification Number for TestAmerica Los Angeles is E87652. The test results listed within this Laboratory Report pertain only to the samples tested at TestAmerica Los Angeles, unless otherwise indicated. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica.*

*The Chain of Custody, 1 page, is included and is an integral part of this report. This entire report was reviewed and approved for release.*

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 714-258-8610.

Approved By:

Marisol Tabirara
Project Manager

TestAmerica
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Bureau Veritas N.A. Inc Costa Mesa
1565 MacArthur Blvd
Costa Mesa, CA 92626
Gustavo Valdivia

Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

| SAMPLE IDENTIFICATION | LAB NUMBER | COLLECTION | MATRIX | CONTAINER TYPE |
|---|---|---|---|---|
| B-1-VES-082809 | LSH0181-01 | 08/28/09 09:50 | Air | Passivated Canister |

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Gustavo Valdivia

Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

## ANALYTICAL REPORT

**Sample ID: LSH0181-01 (B-1-VES-082809 - Air)** — **Sampled: 08/28/09 09:50**

**EPA TO14A - Volatile Organic Compounds by GC/MS**

| Analyte | Result | Data Qualifiers | Units | MDL | RL | Dilution | Date Analyzed | Instrument | Analyst | QC Batch |
|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | | ppbv | 2.5 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Benzene | ND | | ppbv | 1.5 | 3.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Benzyl chloride | ND | | ppbv | 2.0 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Bromodichloromethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Bromoform | ND | | ppbv | 0.50 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Bromomethane | ND | | ppbv | 2.0 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 2-Butanone (MEK) | ND | | ppbv | 2.0 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| **Carbon disulfide** | **6.2** | | ppbv | 2.0 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Carbon tetrachloride | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Chlorobenzene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Dibromochloromethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Chloroethane | ND | | ppbv | 1.5 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Chloroform | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Chloromethane | ND | | ppbv | 2.0 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,2-Dibromoethane (EDB) | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.90 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.80 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,4-Dichlorobenzene | ND | | ppbv | 1.0 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| **Dichlorodifluoromethane** | **5.1** | | ppbv | 1.5 | 3.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,1-Dichloroethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,2-Dichloroethane | ND | | ppbv | 1.5 | 3.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.80 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| trans-1,2-Dichloroethene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,1-Dichloroethene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,2-Dichloropropane | ND | | ppbv | 1.5 | 3.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| cis-1,3-Dichloropropene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| trans-1,3-Dichloropropene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Ethylbenzene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 4-Ethyltoluene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Hexachlorobutadiene | ND | | ppbv | 1.3 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 2-Hexanone | ND | | ppbv | 2.0 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Methylene chloride | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 4-Methyl-2-pentanone (MIBK) | ND | | ppbv | 2.0 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Styrene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| **Tetrachloroethene** | **2.6** | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| Toluene | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 2.5 | 5.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,1,1-Trichloroethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| 1,1,2-Trichloroethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |
| **Trichloroethene** | **1.9** | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9I09009 |

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Gustavo Valdivia

Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

## ANALYTICAL REPORT

| Analyte | Result | Data Qualifiers | Units | MDL | RL | Dilution | Date Analyzed | Instrument | Analyst | QC Batch |
|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID: LSH0181-01 (B-1-VES-082809 - Air) - cont.** | | | | | | | | **Sampled: 08/28/09 09:50** | | |
| **EPA TO14A - Volatile Organic Compounds by GC/MS - cont.** | | | | | | | | | | |
| Trichlorofluoromethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 1.3 | 3.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 1.1 | 3.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |
| Vinyl acetate | ND | | ppbv | 2.0 | 10 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |
| Vinyl chloride | ND | | ppbv | 2.0 | 4.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |
| **Xylenes, total** | **3.4** | | ppbv | 1.0 | 2.0 | 1.0 | 09/09/09 01:52 | MSA | AD | 9109009 |

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Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

## PROJECT QUALITY CONTROL DATA

### Blank

| Analyte | Result | Data Qualifier | Units | MDL | RL | Dilution | Date Analyzed | Instrument | Analyst | QC Batch |
|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID: 9I09009-BLK1 (Blank - Air)** | | | | | | | | | | |
| **EPA TO14A - Volatile Organic Compounds by GC/MS** | | | | | | | | | | |
| Acetone | ND | | ppbv | 2.5 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Benzene | ND | | ppbv | 1.5 | 3.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Benzyl chloride | ND | | ppbv | 2.0 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Bromodichloromethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Bromoform | ND | | ppbv | 0.50 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Bromomethane | ND | | ppbv | 2.0 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 2-Butanone (MEK) | ND | | ppbv | 2.0 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Carbon disulfide | ND | | ppbv | 2.0 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Carbon tetrachloride | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Chlorobenzene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Dibromochloromethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Chloroethane | ND | | ppbv | 1.5 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Chloroform | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Chloromethane | ND | | ppbv | 2.0 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2-Dibromoethane (EDB) | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2-Dichlorobenzene | ND | | ppbv | 0.90 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,3-Dichlorobenzene | ND | | ppbv | 0.80 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,4-Dichlorobenzene | ND | | ppbv | 1.0 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Dichlorodifluoromethane | ND | | ppbv | 1.5 | 3.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,1-Dichloroethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2-Dichloroethane | ND | | ppbv | 1.5 | 3.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| cis-1,2-Dichloroethene | ND | | ppbv | 0.80 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| trans-1,2-Dichloroethene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,1-Dichloroethene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2-Dichloropropane | ND | | ppbv | 1.5 | 3.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| cis-1,3-Dichloropropene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| trans-1,3-Dichloropropene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Ethylbenzene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 4-Ethyltoluene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Hexachlorobutadiene | ND | | ppbv | 1.3 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 2-Hexanone | ND | | ppbv | 2.0 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Methylene chloride | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 4-Methyl-2-pentanone (MIBK) | ND | | ppbv | 2.0 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Styrene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,1,2,2-Tetrachloroethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Tetrachloroethene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Toluene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2,4-Trichlorobenzene | ND | | ppbv | 2.5 | 5.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |

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Bureau Veritas N.A. Inc Costa Mesa
1565 MacArthur Blvd
Costa Mesa, CA 92626
Gustavo Valdivia

Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

## PROJECT QUALITY CONTROL DATA

**Blank - Cont.**

| Analyte | Result | Data Qualifier | Units | MDL | RL | Dilution | Date Analyzed | Instrument | Analyst | QC Batch |
|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID: 9I09009-BLK1 (Blank - Air) - cont.** | | | | | | | | | | |
| **EPA TO14A - Volatile Organic Compounds by GC/MS** | | | | | | | | | | |
| 1,1,1-Trichloroethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,1,2-Trichloroethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Trichloroethene | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Trichlorofluoromethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,2,4-Trimethylbenzene | ND | | ppbv | 1.3 | 3.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| 1,3,5-Trimethylbenzene | ND | | ppbv | 1.1 | 3.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Vinyl acetate | ND | | ppbv | 2.0 | 10 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Vinyl chloride | ND | | ppbv | 2.0 | 4.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |
| Xylenes, total | ND | | ppbv | 1.0 | 2.0 | 1.00 | 09/08/09 18:26 | MSA | AA | 9I09009 |

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Costa Mesa, CA 92626
Gustavo Valdivia

Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

## PROJECT QUALITY CONTROL DATA

### LCS

| Analyte | Result | Data Qualifiers | Units | RL | Dilution | Spike Conc | % Rec | Target Range | Instrument | Date Analyzed | QC Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID: 9I09009-BS1 (LCS - Air)** | | | | | | | | | | | |
| **EPA TO14A - Volatile Organic Compounds by GC/MS** | | | | | | | | | | | |
| Benzene | 47.7 | | ppbv | 3.0 | 1.00 | 50.0 | 95% | 70 - 115 | MSA | 09/08/09 15:58 | 9I09009 |
| Bromodichloromethane | 44.8 | | ppbv | 2.0 | 1.00 | 50.0 | 90% | 70 - 125 | MSA | 09/08/09 15:58 | 9I09009 |
| Bromomethane | 41.9 | | ppbv | 4.0 | 1.00 | 50.0 | 84% | 50 - 125 | MSA | 09/08/09 15:58 | 9I09009 |
| 2-Butanone (MEK) | 53.4 | | ppbv | 10 | 1.00 | 55.0 | 97% | 70 - 130 | MSA | 09/08/09 15:58 | 9I09009 |
| Carbon disulfide | 53.1 | | ppbv | 10 | 1.00 | 50.0 | 106% | 70 - 130 | MSA | 09/08/09 15:58 | 9I09009 |
| Chlorobenzene | 47.5 | | ppbv | 2.0 | 1.00 | 52.5 | 90% | 70 - 110 | MSA | 09/08/09 15:58 | 9I09009 |
| Chloroform | 42.4 | | ppbv | 2.0 | 1.00 | 50.0 | 85% | 70 - 130 | MSA | 09/08/09 15:58 | 9I09009 |
| 1,4-Dichlorobenzene | 37.2 | | ppbv | 4.0 | 1.00 | 50.0 | 74% | 55 - 120 | MSA | 09/08/09 15:58 | 9I09009 |
| Dichlorodifluoromethane | 39.3 | | ppbv | 3.0 | 1.00 | 50.0 | 79% | 20 - 150 | MSA | 09/08/09 15:58 | 9I09009 |
| cis-1,2-Dichloroethene | 45.3 | | ppbv | 2.0 | 1.00 | 53.5 | 85% | 70 - 130 | MSA | 09/08/09 15:58 | 9I09009 |
| Tetrachloroethene | 41.9 | | ppbv | 2.0 | 1.00 | 52.5 | 80% | 70 - 110 | MSA | 09/08/09 15:58 | 9I09009 |
| 1,1,2-Trichloroethane | 44.4 | | ppbv | 2.0 | 1.00 | 50.0 | 89% | 70 - 110 | MSA | 09/08/09 15:58 | 9I09009 |
| Trichloroethene | 42.5 | | ppbv | 2.0 | 1.00 | 50.0 | 85% | 70 - 115 | MSA | 09/08/09 15:58 | 9I09009 |
| 1,2,4-Trimethylbenzene | 43.3 | | ppbv | 3.0 | 1.00 | 50.0 | 87% | 50 - 145 | MSA | 09/08/09 15:58 | 9I09009 |
| Vinyl chloride | 45.8 | | ppbv | 4.0 | 1.00 | 50.0 | 92% | 70 - 115 | MSA | 09/08/09 15:58 | 9I09009 |
| Xylenes, total | 145 | | ppbv | 2.0 | 1.00 | 150 | 96% | 70 - 130 | MSA | 09/08/09 15:58 | 9I09009 |

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Bureau Veritas N.A. Inc Costa Mesa
1565 MacArthur Blvd
Costa Mesa, CA 92626
Gustavo Valdivia

Work Order: LSH0181
Project: City of Burbank
Project Number: 25098-098191.01.001

Received: 08/31/09 14:20
Reported: 09/10/09 15:26

## PROJECT QUALITY CONTROL DATA

### LCS Dup

| Analyte | Result | Data Qualifiers | Units | RL | Dilution | Spike Conc | % Rec | Target Range | RPD | Limit | Date Analyzed | QC Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID: 9I09009-BSD1 (LCS Dup - Air)** | | | | | | | | | | | | |
| **EPA TO14A - Volatile Organic Compounds by GC/MS** | | | | | | | | | | | | |
| Benzene | 49.5 | | ppbv | 3.0 | 1.00 | 50.0 | 99% | 70 - 115 | 4 | 25 | 09/08/09 16:30 | 9I09009 |
| Bromodichloromethane | 46.0 | | ppbv | 2.0 | 1.00 | 50.0 | 92% | 70 - 125 | 3 | 25 | 09/08/09 16:30 | 9I09009 |
| Bromomethane | 41.9 | | ppbv | 4.0 | 1.00 | 50.0 | 84% | 50 - 125 | 0.2 | 25 | 09/08/09 16:30 | 9I09009 |
| 2-Butanone (MEK) | 51.2 | | ppbv | 10 | 1.00 | 55.0 | 93% | 70 - 130 | 4 | 25 | 09/08/09 16:30 | 9I09009 |
| Carbon disulfide | 50.6 | | ppbv | 10 | 1.00 | 50.0 | 101% | 70 - 130 | 5 | 25 | 09/08/09 16:30 | 9I09009 |
| Chlorobenzene | 46.4 | | ppbv | 2.0 | 1.00 | 52.5 | 88% | 70 - 110 | 2 | 25 | 09/08/09 16:30 | 9I09009 |
| Chloroform | 40.1 | | ppbv | 2.0 | 1.00 | 50.0 | 80% | 70 - 130 | 5 | 25 | 09/08/09 16:30 | 9I09009 |
| 1,4-Dichlorobenzene | 40.0 | | ppbv | 4.0 | 1.00 | 50.0 | 80% | 55 - 120 | 7 | 25 | 09/08/09 16:30 | 9I09009 |
| Dichlorodifluoromethane | 38.5 | | ppbv | 3.0 | 1.00 | 50.0 | 77% | 20 - 150 | 2 | 25 | 09/08/09 16:30 | 9I09009 |
| cis-1,2-Dichloroethene | 43.3 | | ppbv | 2.0 | 1.00 | 53.5 | 81% | 70 - 130 | 5 | 25 | 09/08/09 16:30 | 9I09009 |
| Tetrachloroethene | 41.1 | | ppbv | 2.0 | 1.00 | 52.5 | 78% | 70 - 110 | 2 | 25 | 09/08/09 16:30 | 9I09009 |
| 1,1,2-Trichloroethane | 45.2 | | ppbv | 2.0 | 1.00 | 50.0 | 90% | 70 - 110 | 2 | 25 | 09/08/09 16:30 | 9I09009 |
| Trichloroethene | 44.2 | | ppbv | 2.0 | 1.00 | 50.0 | 88% | 70 - 115 | 4 | 25 | 09/08/09 16:30 | 9I09009 |
| 1,2,4-Trimethylbenzene | 44.2 | | ppbv | 3.0 | 1.00 | 50.0 | 88% | 50 - 145 | 2 | 25 | 09/08/09 16:30 | 9I09009 |
| Vinyl chloride | 45.2 | | ppbv | 4.0 | 1.00 | 50.0 | 90% | 70 - 115 | 1 | 25 | 09/08/09 16:30 | 9I09009 |
| Xylenes, total | 145 | | ppbv | 2.0 | 1.00 | 150 | 96% | 70 - 130 | 0.06 | 25 | 09/08/09 16:30 | 9I09009 |

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| | | | | | |
|---|---|---|---|---|---|
| Bureau Veritas N.A. Inc Costa Mesa | Work Order: | LSH0181 | Received: | 08/31/09 14:20 |
| 1565 MacArthur Blvd | | | Reported: | 09/10/09 15:26 |
| Costa Mesa, CA 92626 | Project: | City of Burbank | | |
| Gustavo Valdivia | Project Number: | 25098-098191.01.001 | | |

**DATA QUALIFIERS AND DEFINITIONS**

**ND** Not detected at the reporting limit (or method detection limit if shown)

# CHAIN OF CUSTODY RECORD

LSH0181

Clayton Group Services, Inc.
*A Bureau Veritas Company*

1565 MacArthur Blvd., Costa Mesa, CA 92626
Tel: 714.431.4100 Fax: 714.825.0685

**Turn Around Time (TAT)**
Rush ☐ Normal ☒
Rush TAT: _____
Results Delivery: Phone ☐ Fax ☐
Hardcopy ☒ EDD ☒



| | |
|---|---|
| **PROJECT NUMBER:** 25098-098191.00.001 | **PROJECT NAME:** City of Burbank |
| **SEND RESULTS & INVOICE TO:** | **LABORATORY INFORMATION:** |
| **Project Manager:** Gustavo Valdivia | **Name:** Test America |
| **Telephone:** | **Address:** |
| **Fax:** File | **Phone/Fax:** File |

| Sample | | Collection | | Matrix | Preserv. | # of Cont. | ANALYSIS REQUESTED: TO-14A | Remarks |
|---|---|---|---|---|---|---|---|---|
| Number | Location | Time | Date | | | | | |
| B-1-VES-082809 | Stack | 0950 | 8/28/09 | Air | \ | 1 | X | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | TOTAL NUMBER OF CONTAINERS (THIS SHIPMENT) | | | | 1 | | TOTAL NUMBER OF SAMPLES (THIS SHIPMENT) 1 |

**CHAIN OF CUSTODY**

| | | | |
|---|---|---|---|
| Collected by: **(Print)** Kevin & Martin | | Collector's Signature: Kevin Ard MMD | |
| Relinquished by: Kevin Ard MMD | Date/Time 8-31-09 / 11:40 | Received by: Rob Herrera | Date/Time 8-31-09 / 11:40 |
| Relinquished by: Rob Herrera | Date/Time 8-31-09 / 1440 | Received by: | Date/Time 8/31/09 / 14:30 |
| Method of Shipment: | | Received at Lab. by: | Date/Time / |
| Sample Condition Upon Receipt **(Circle):** | Acceptable | Other **(Explain)** | |

TestAmerica

# CANISTER FIELD DATA RECORD

CLIENT: Bureau Veritas
CANISTER SERIAL #: 932666
DATE CLEANED: 081209E
CLIENT SAMPLE #: _____
SITE LOCATION: _____

VFR ID: _____
Duration of comp. : _____ Hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

| READING | TIME | Vac. (Inches Hg) Or PRESS. (psig) | DATE | INITIALS |
|---|---|---|---|---|
| INITIAL VACUUM CHECK | | 30" | 8/26/09 | |
| INITIAL FIELD VACUUM | | | | |
| FINAL FIELD READING | | | | |

| LABORATORY CANISTER PRESSURIZATION | | | |
|---|---|---|---|
| INITIAL VACUUM (Inches Hg / PSIA (circle unit used)) | 13.82 | 9/1/09 | X |
| FINAL PRESSURE (PSIA) | 24.44 | 9/1/09 | X |

Pressurization Gas: N2

COMMENTS:

| COMPOSITE TIME (HOURS) | FLOW RATE RANGE (ml/min) |
|---|---|
| 15 Min. | 316 – 333 |
| 30 Min. | 158 – 166.7 |
| 1 | 79.2 – 83.3 |
| 2 | 39.6 – 41.7 |
| 4 | 19.8 – 20.8 |
| 6 | 13.2 – 13.9 |
| 8 | 9.9 – 10.4 |
| 10 | 7.92 – 8.3 |
| 12 | 6.6 – 6.9 |
| 24 | 3.5 – 4.0 |

# CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15 M2

Date Cleaned/Batch: B081209E

Date of QC: 8-13-09

Data File Number: M120813L (MS13)

**CANISTER ID NUMBERS**

| | |
|---|---|
| * 12877 | 9115 B |
| 12402 | ✓ 932666 |
| 12464 | A-295 |
| DL0842 | 9302 BB |
| A-239 | 93158 |
| 0155 | 93050 |

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

**"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.**

AD
Reviewed By:

8/13/09
Date:

N:\CO\DOCS\TestAmerica DOCs\Can QC Cert 20070712.doc

TestAmerica Los Angeles

AIR TOXICS - TO-14A/TO-15 MEDIUM LEVEL

Data file : \\LAPC046\MSB_CC\chem\MSB.i\090813.B\MB08136.D
Lab Smp Id: BLANK Client Smp ID: 12877
Inj Date : 13-AUG-2009 21:09
Operator : AD Inst ID: MSB.i
Smp Info : BLANK,12877,,SCREEN BLANK
Misc Info : 1,1,500,500,3,,BLANK,BLANK.SUB,0,
Comment :
Method : \\LAPC046\MSB_CC\chem\msb.i\090813.B\TO14A.m
Meth Date : 13-Aug-2009 17:17 donga Quant Type: ISTD
Cal Date : 30-JUN-2009 15:41 Cal File: IC06308.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BLANK.SUB
Subtraction File: \\LAPC046\MSB_CC
Target Version: 4.04
Processing Host: LAPC046

Concentration Formula: Amt * DF * (FinalPres / InitPres)*(CalVol / SmpVol)

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| FinalPres | 1.000 | FinalPres |
| InitPres | 1.000 | InitPres |
| CalVol | 500.000 | CalVol |
| SmpVol | 500.000 | SmpVol |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| * 57 Bromochloromethane | 49 | 8.507 | 8.516 | (1.000) | 812108 | 50.0000 | |
| $ 65 1,2-Dichloroethane-d4 | 65 | 9.527 | 9.544 | (0.924) | 891061 | 52.8681 | 52.87 |
| * 73 1,4-Difluorobenzene | 114 | 10.312 | 10.329 | (1.000) | 2769595 | 50.0000 | |
| $ 88 Toluene-d8 | 100 | 12.919 | 12.919 | (1.253) | 1292391 | 48.5706 | 48.57 |
| * 101 Chlorobenzene-d5 | 117 | 15.572 | 15.572 | (1.000) | 2186629 | 50.0000 | |
| $ 116 4-Bromofluorobenzene | 95 | 17.819 | 17.818 | (1.144) | 2256786 | 51.0752 | 51.08 |

Data File: \\LAPC046\MSB_CC\chem\MSB.i\090813.B\MB08136.D
Date : 13-AUG-2009 21:09
Client ID: 12877
Sample Info: BLANK,12877,,SCREEN BLANK

Column phase: J&W DB-624

Instrument: MSB.i

Operator: AD
Column diameter: 0.53

LSH0181